REMARKS/ARGUMENTS

Claims 1-3 and 5 were rejected as being anticipated by Menconi (US patent number 4,436,779). Claim 1 and claim 5 have been amended to indicate that both the long legs[1] and the short legs are stud shaped. Menconi discloses only one set of legs 35 which may be considered stud shaped. See Figure 7 of Menconi. The examiner apparently considers the expansion joint 50 (Figure 5 and Figure 7) to be a short leg. Clearly, the the expansion joint 50 of Menconi is neither stud shaped nor leg shaped. The expansion joint 50 of Menconi is shaped as an elongated trough. Further, the Menconi expansion joint is not intended to and does not function to provide support as the short legs of claim 1 and claim 5 do. Claim 1 and claim 5 provide a further limitation not found within Menconi. That is the limitation "wherein the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat." Any mat resiliency and mat compression affect provided by the expansion joint, or any other structure deemed to be leg like, of Menconi is coincidental and unintended mat resiliency and mat compression and, therefore, Menconi does not satisfy the limitation of "a selected mat compression" found in claim 1 and claim 5.

Figures 4 and 5 of Menconi depict a small rectangle at the intersections of the expansion joints 50. There is no rational basis to consider this a short leg. The rectangular structure contains no reference number. There is no discussion of it within the specification. If anything,

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[1] One definition of the word "leg" provided by the American Heritage Dictionary, third edition is "a supporting part resembling a leg in shape or function."

it appears to be an unreferenced drain opening within the expansion joint 50, such as that shown by reference number 66 in Figure 8 of Menconi.

Menconi does not disclose a plurality of stud shaped long legs and stud shaped short legs perpendicularly attached to the bottom surface of the mat for resiliently supporting the mat base and modifying the resiliency of the mat. Further, Menconi lacks long legs and short legs which are adapted to provide a selected mat compression when a load is applied to the top surface of the mat. The clarification indicating that the long legs and the short legs within claims 1 and 5 are stud shaped avoids having the legs referred to within those claims read on any miscellaneous structures, such as the expansion joints 50, of Menconi.

Claims 1 and 5 have the following limitations which are not disclosed within Menconi:

1) a plurality of stud shaped short legs perpendicularly attached to the bottom surface of the mat;

2) for supporting the mat base;

3) and for modifying the resiliency of the mat;

4) wherein the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat.

Claims 1 and 5 should be allowed if any one of these four limitations are not disclosed by Menconi. Menconi fails to disclose all four of the limitations. Additionally, claims 1 and 5 have been amended to indicate that the short legs are stud shaped.

The for limitations referred to above should not be rejected because they may appear

within a "for" clause, or because of the "adapted to" language. Pursuant to *Phillips* v. *AWH Corp*[2]. (this was a July 12, 2005 en banc decision of the United States Court of Appeals for the Federal Circuit Court) each word should be considered. In section IV A[3] the court stated:

> The critical language of claim 1 of the '798 patent – "further means[4] disposed inside the shell *for increasing its load bearing capacity* [emphasis supplied] comprising internal steel baffles extending inwardly from the steel shell walls" – imposes three clear requirements with respect to the baffles. First, the baffles must be made of steel. Second, they must be part of the load-bearing means for the wall section. Third, they must be pointed inward from the walls.

Thus, the Court inherently held that it would be error to ignore a limitation in a claim provided by a "for clause." A full reading of Phillips confirms that each of the four limitations within claims 1 and 5, referred to above, must be considered.

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[2] Applicant intends to provide a copy of this case to the examiner by e-mail or facsimile transmission within the near future.

[3] Because of the recency of this decision applicant has been unable to obtain a copy of this case as formatted within the federal reporter and, therefore, references the opinion sections in lieu of actual page numbers.

[4] In section I the court held that this was not a means-plus-function claim because it did not contain purely functional limitations without a reference to a structure that performs the function.

Claims 1 and 5 should be allowed because Menconi discloses none of the four aforesaid limitations.

Claim 2 is also not anticipated by Menconi. Claim 2 states:

> The mat of claim 1, further comprising a plurality of ribs wherein each said rib connects a pair of legs, wherein each said rib is positioned between the tops and bottoms of the legs to which it is connected, and wherein the length perpendicular to the mat of each said rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is attached, for preventing the mat from becoming embedded within a floor grating upon which it sits.

Additionally, claim number 12 has been added. Claim number 12 states:

> The mat of claim 1, further comprising a plurality of ribs wherein each said rib connects a pair of long legs and wherein the length perpendicular to the mat of each said rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is attached, for preventing the mat from becoming embedded within a floor grating upon which it sits.

Claim 12 has the limitation that the ribs connect a pair of long legs (as opposed to the short legs). Even if the examiner's rejection of claim 2 is correct, claim 12 should be allowed

because Menconi does not have its long legs 35 (see Menconi Figure 7) connected by ribs.

Claim 2 should also be allowed. Claim 2 contains the following limitations:

1) each rib connects a pair of legs;

2) each said rib is positioned between the tops and bottoms of the legs to which it is connected;

3) the length perpendicular to the mat of each rib is approximately the length of the legs to which it is attached;

4) [the ribs are] for preventing the mat from becoming embedded within a floor grating upon which it sits.

The ribs in Menconi do not connect a pair of legs. For example, the ribs 32 shown in Figure 3 of Menconi are on top of the mat. Thus, they do not connect legs 35 on the bottom of the mat. Another type of rib 65 is positioned within the expansion joint 50 of Menconi, as shown in his Figure 5 and Figure 7. This second type of rib 65 also does not connect any legs. In the event that the walls of the trough like expansion joint 50 of Menconi are considered to be legs, this would be inconsistent with the common understanding of the term "legs," including the definition referred to above from the American Heritage Dictionary. In any event the limitation that the legs are stud shaped, as indicated within the amended claim 1 and claim 5, would prevent interpreting any structure on the underside of the Menconi mat other than the legs 35 themselves to be legs.

One of the objects of the embodiment claimed within claim 2 is to provide a mat which

will not become embedded within a floor grating upon which it sits. A floor grating is a three-dimensional device often placed in proximity to an industrial machine. The floor grating is comprised of a plurality of small compartments having coplanar openings at its top. The openings provide an entrance for liquids and other contaminants to enter and dissipate. The openings also provide a grated floor surface. Prior art mats typically have legs on their underside. Some of the legs tend to ride on top of the grating while others tend to sink within the openings of the grating. As a result, prior art mats tend to become embedded within floor gratings upon which they sit. In order to solve this problem the embodiment referred to within claim 2 provides ribs which connect pairs of legs. The ribs are approximately the length of the legs to which they are attached. The ribs will sit upon the structures defining the grating openings. This will prevent the mat from becoming embedded within the floor grating upon which it sits. However, this objective is only accomplished if the ribs are approximately the length of the legs to which they are attached. If the ribs are significantly shorter, the mat will become embedded within the floor grating upon which it sits. Menconi discloses no structures connecting legs 35 wherein those structures are approximately the same length as the legs 35. If the mat depicted within the Menconi drawings is placed upon a floor grating it will embed within the grating because of the lack of like connecting ribs having the appropriate length.

Claim 2 also provides that the ribs are "for preventing the mat from becoming embedded within a floor grating upon which it sits." Pursuant to the Phillips case this phrase must be considered in determining the type of rib structure defined. There is no structure on the

underside of the Menconi mat, ribs or otherwise, which prevents that mat from becoming embedded within a floor grating upon which it sits.

Figure 4 and Figure 7 of Menconi show legs (35) attached to the bottom surface of the mat. Applicant questions whether the examiner considered any part of the bottom surface of the Menconi mat to be a rib. To avoid any confusion claim 2 has been amended to contain the following limitation: "wherein each said rib is positioned between the tops and bottoms of the legs to which it is connected." Thus Applicant's ribs form webs between the legs to which they are connected. The ribs/legs are what prevent Applicant's mat from becoming embedded within grating.

Claim 2 is not anticipated by Menconi because Menconi does not have ribs which connect pairs of legs; Menconi does not have ribs positioned between the tops and bottoms of the legs to which the ribs are connected; Menconi does not have ribs which are approximately the length of the legs to which they are attached; and Menconi discloses no structure on the underside of his mat which will prevent the mat from becoming embedded within a floor grating upon which it sits.

Claim 3 was also rejected on the basis of Menconi. Claim 3 provides:

A mat comprising:

(a) a mat base having a top surface and a bottom surface; and

(b) a plurality of channels subdividing the mat top

surface into mat segments, wherein each said channel has a floor and a lateral wall surface and wherein the lateral wall surface has a drain opening permitting drainage from the top surface of the mat to below the bottom surface of the mat.

Applicant suggests that the examiner was mistaken in making this rejection. As can be seen in Figure 6 of applicant's drawings each channel has a floor and a lateral wall surface. The lateral wall surface is vertically oriented with respect to the mat. Applicant's drain opening (58) is provided within the lateral wall surface. All of the drain openings disclosed by Menconi (see 33 Figure 2 and 66 Figure 8) are on horizontal surfaces. Menconi's drain openings and his mat surface are coplanar. Applicant's vertically oriented drain openings are less likely to get clogged by debris and are less likely to trap foreign objects than horizontally oriented drain openings.

Claim 3 was also rejected as being anticipated by Perry (US patent number 212,497). Neither Figure 1 nor Figure 2 of Perry show any drain openings. The specification makes no reference to drain openings. If any of the rectangular structures shown in the drawings are considered to be drain openings the rejection would suffer from the same infirmities as the rejection based upon Menconi. Applicant's drain opening is on a vertically oriented wall surface. No such drain opening is shown in Perry or Menconi.

On page 4 of the office action claim 5 was rejected as being anticipated by Menconi. Claim 5 combined the limitations from claim 1 (long legs/short legs), claim 2 (ribs connected to

legs) and claim 3 (lateral wall surface drain opening). Claim 5 has been amended to provide for stud shaped long legs and stud shaped short legs. The examiner's rejection of claim 5 restated the grounds for rejection of claims 1-3. Applicant's arguments pertaining to claims 1-3 made above are incorporated by reference. For the reasons stated claim 5 should be allowed. Menconi fails to disclose the following limitations found within Applicant's claim 5:

1) a plurality of stud shaped short legs perpendicularly attached to the bottom surface of the mat;
2) for supporting the mat base;
3) and for modifying the resiliency of the mat;
4) wherein the long legs and the short legs are adapted to provide a selected mat compression when a load is applied to the top surface of the mat;
5) each rib connects a pair of legs;
6) each said rib is positioned between the tops and bottoms of the legs to which it is connected;
7) the length perpendicular to the mat of each rib is approximately the length of the legs to which it is attached;
8) [the ribs are] for preventing the mat from becoming embedded within a floor grating upon which it sits; and
9) a drain opening within the lateral wall surface permitting drainage from the top surface of the mat to below the bottom surface of the mat.

Claims 1 and 2 were also rejected as being anticipated by Vaux (US patent number 4,727,697). The Vaux patent relies on a series of air filled cells or cavities #26 surrounded by walls or uniform length ribs #30 extending to the ground or floor which trap air for shock absorption when the top surface is compressed. Extending down from each air cell are medium ribs #52 which come in contact with the base or ground for added support when the cavity is depressed sufficiently not allowing the air to escape the cavity. The Vaux patent requires that a two-part urethane liquid be spread over the top of the mat (Col. 2 lines 61-65) *To aesthetically improve the surface, prevent the escape of air from the air cells and also to prevent wear and tear on the surface*.....and aggregate is broadcast over the entire top surface. Also, the mat is GLUED to the asphalt or concrete sub base around the perimeter to form an air lock preventing the escape of air from the air cells.

Applicant's design uses:

1. Legs not ribs for compression;
2. Does not rely on air cells to cushion falls;
3. Does not need any coating on the top or around the perimeter to ensure shock absorption by sealing air cells; and
4. Applicant's design allows the mat to drain.

The Vaux patent cannot drain because it relies on the trapping of air for a cushion. If it would drain the air would escape from the air cells negating the shock absorption.

Vaux does not disclose stud shaped long legs and stud shaped short legs. Vaux does not

utilize legs, but rather utilizes ribs (30, 52). The ribs (30) are used to form air filled cells (26). His mat resiliency is provided by the air filled cells. At best the median rib (52) serves as a stop when an excessive force is placed upon the mat. The median rib does not modify the resiliency of the mat and does not provide a selected mat compression when a load is applied to the top surface of the mat. Applicant's mat uses legs, not ribs, for compression.

Claim 2 provides:

> The mat of claim 1, further comprising a plurality of ribs wherein each said rib connects a pair of legs, wherein each said rib is positioned between the tops and bottoms of the legs to which it is connected, and wherein the length perpendicular to the mat of each said rib is approximately the length of the legs to which it is attached, but not longer than either of the legs to which it is attached, for preventing the mat from becoming embedded within a floor grating upon which it sits.

Vaux does not disclose a rib connecting a pair of legs. If the ribs of Vaux (52, 30) are considered legs, then there can be no legs connected by ribs. Vaux does not disclose any rib positioned between the tops and bottoms of the legs to which it is connected. Vaux also fails to disclose a rib having a length perpendicular to the mat which is approximately the length of the legs to which the rib is attached, but not longer than either of the legs to which it is attached.

The arguments made above pertaining to the issue of whether claims 1 and 2 are

anticipated by Menconi are incorporated herein with Vaux being substituted for Menconi.

Claim 4 was rejected as being anticipated by Van der Pyl (US patent number 1,619,773). Claim 4 has been amended to read as follows:

A mat comprising:

(a) a mat base having a top surface and a bottom surface;

(b) a plurality of grit trenches embedded within the top surface of the mat, wherein each said grit trench has two open ends and each said end ~~has a~~is bounded by an upstanding nubby retention lip forming a dam for retaining adhesive and grit; and

(c) grit bonded into the trenches by an adhesive.

Additionally, new claim 13 has been added. Claim 13 is a dependent claim which depends upon claim 4. Claim 13 provides:

The mat of claim 4, wherein at least one grit trench is supported by some of the long legs perpendicularly attached to the bottom surface of the mat for reducing flexure within the trench.

Van Der Pyl pertains to tiles made with abrasive grains mounted on a backing of deformable material to assist in leveling an uneven floor. This is a common way to buy ceramic tiles used in a bathroom on a sheet of open mesh reinforcement. The patent discloses the use of tiles not in any way does it infer that grit be broadcasted over an entire surface or selectively broadcasted for slip resistance in the patent. The patent covers the use of tiles for a slip resistance tread. If tiles were used in a rubber mat of applicant's design they would crack or have

to be fully supported resulting in a non-flexible mat surface and would also require individual placement. It is doubtful one could roll up the mat.

Van der Pyl does not disclose a mat base having a top surface and a bottom surface. He does not disclose a plurality of grit trenches. He does not disclose a plurality of grit trenches embedded within the top surface of the mat. He shows no grit trench having two ends. Claim 4 has been amended to indicate that the grit trench has two open ends. One of the objects of this invention is to prevent adhesive from flowing out of an open end of a trench. Van der Pyl does not disclose a retention lip. The retention lip forms a dam for retaining adhesive and grit. Van der Pyl uses blocks of bonded abrasive grains (column 1, line 42). Nothing in Van der Pyl is intended to prevent adhesive from flowing out of a trench. Therefore, it would be a mere coincidence if Van der Pyl disclosed a retention lip; he does not disclose the retention lip. The amended language of claim 4 provides that each open end of a grit trench is bounded by an upstanding nubby retention lip forming a dam. This further distinguishes claim 4 from Van der Pyl because Van der Pyl certainly does not disclose an open and grit trench bounded by upstanding nubby retention lips forming a dam.

New claim 13 (as well as claim 7) states that "at least one grit trench is supported by some of the long legs perpendicularly attached to the bottom surface of the mat for reducing flexure within the trench." When grit is bonded into a trench it becomes brittle. If the portion of the mat under the grit is not supported the mat will flex in that area. This will tend to cause the bonded grit to fracture. In order to prevent this problem support is provided under the grit trench.

The support is provided by long legs. Since the long legs contact the underlying foundation they will inhibit the tendency of the grit trench to flex and thereby inhibit the bonded grit from cracking or fracturing. Nothing in Van der Pyl or any of the other cited references discloses or suggests this use of the mat legs to prevent bonded grit from cracking or fracturing.

Claim 14 has been added. Claim 14 provides: "The mat of claim 4, wherein the grit trenches are formed into X-shaped configurations." The X-shaped configuration is preferred because it permits adhesive and grit to be easily deposited into the grit trenches with a programmable robot, as described in the specification. The X-shaped configuration is also preferred because it requires substantially less grit and adhesive compared to a mat having its entire top surface covered with adhesive and grit. The prior art does not disclose the X-shaped configuration of the grit trenches.

Claims 6 and 7 were rejected under 35 USC 103(a) is being unpatentable over Menconi in view of Van der Pyl. Claims 6 and 7 are dependent claims which depend upon claim 5. Since claim 5 should be allowed for the reasons previously stated, claims 6 and 7 should also be allowed.

The grit trench of claim 7 which is supported by the long legs of the mat was not addressed by the examiner and is not disclosed by Van der Pyl. For this reason claim 7 should be allowed.

Nothing within Van der Pyl suggests combining a plurality of grit trenches, wherein each said grit trench has two ends and each said end has a retention lip forming a dam for retaining

adhesive and grit, with a mat. Van der Pyl's invention is not a mat. It is a "safety tread unit." It is comprised of blocks of bonded abrasive grains. It is fastened to a surface with nails or screws. Van der Pyl's invention is unrelated to bonding grit into trenches formed within a mat. Applicant appears to be the first person to attempt to solve the problem of grit cracking after it is secured to a mat. He also appears to be the first person to attempt to selectively place grit upon a mat. The selective placement of grit upon a mat reduces the overall cost of producing a mat having an abrasive top surface. The prior art teaches sprinkling grit over the entire top surface of the mat and bonding it to the mat with an adhesive. Also, grit within a trench is more durable than grit glued to the top of a mat. This is because the walls of the trench protect a substantial portion of the grit from wear.

The examiner states in the first office action "It would have been obvious to one of ordinary skill in the art at the time of the invention to add grit trenches with grit bonded in the trenches as taught by Van der Pyl in Menconi in order to create a safety tread surface." Applicant respectfully disagrees and requests sufficient evidence for this conclusion.

Paragraph 37 has been replaced to correct a typographical error relating to capitalization.

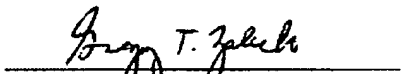
Examiner Interview Summary

On October 26, 2005 a telephonic interview was conducted between the examiner and applicant's attorney. No exhibits were shown and no demonstrations were conducted. Claims 1 through 7 were discussed. No agreement was reached regarding the allowability of claims. Applicant's attorney stated that neither Menconi nor Vaux disclosed a combination of short legs

and long legs for resiliently supporting a mat base and for modifying resiliency of the mat to a selected mat compression when a load is applied. Applicant's attorney pointed out that the drain openings in claim 3 were on the wall of the channel not the floor as shown in the prior art. The examiner agreed to reconsider the prior art in view of this limitation. The examiner indicated that claim the 4 could be narrowed by indicating that the grit trench has two open ends and by providing additional detail regarding the lip shape. The examiner also indicated that the prior art may not show (with respect to claim 2) ribs connected to pairs of long legs, as opposed to legs. The examiner agreed to take into consideration applicant's arguments in the next office action.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,



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